

**Listing of the Claims:**

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (currently amended) An accessor moveably disposed within a data storage and retrieval system, wherein said data storage and retrieval system includes one or more storage slots and a hard disk drive unit removeably disposed in one of said one or more storage slots, wherein each said hard disk drive unit comprises a hard disk, a read/write head, and an information input/output port in communication with said read/write head, said accessor comprising:

a carriage assembly moveably disposed on a rail system;

a vertical pillar extending upwardly from said carriage assembly;

a lifting servo section moveably disposed on said vertical pillar;

a first memory device disposed on said lifting servo section;

an information input/output device connected to first said memory device, wherein said information input/output device can be releaseably coupled to said information input/output port such that information can be exchanged between said hard disk and said first memory device.

2. (original) The accessor of claim 1, wherein said data storage and retrieval system further comprises a power source, and wherein hard disk drive unit further comprises a power port, said accessor further comprising:

a power supply connector connected to said power source;  
wherein said power supply connector can be releaseably connected to said power port  
such that said power source supplies power to said hard disk drive unit.

3. (original) The accessor of claim 2, further comprising:

a gripper mechanism;

wherein said information input/output device is disposed on said gripper mechanism,  
and wherein said power connector is disposed on said gripper mechanism.

4. (original) The accessor of claim 3, further comprising a wireless communication  
device.

5. (original) The accessor of claim 3, wherein said first memory device is disposed on  
said gripper mechanism.

6. (original) The accessor of claim 5, further comprising an accessor control card.

7. (original) The accessor of claim 6, further comprising a second memory device in  
communication with said information input/output device, wherein said second memory device  
is disposed on said accessor control card.

8. (currently amended) A data storage and retrieval system, comprising:

a host computer;

a backplane unit comprising a first information input/output port, wherein said first  
information input/output port is in communication with said host computer;

one or more storage slots;

one or more hard disk drive units removeably disposed in said one or more storage  
slots, wherein each of said one or more hard disk drive units comprises a hard disk, a read/write

head, and a second information input/output port, wherein said read/write head is in communication with said second input/output port;

one or more accessors moveably disposed within said data storage and retrieval system, wherein each of said accessors includes a carriage assembly moveably disposed on a rail system, a vertical pillar extending upwardly from said carriage assembly, a lifting servo section moveably disposed on said vertical pillar, a first memory device disposed on said lifting servo section, ~~a first memory device~~ and an information input/output device, wherein said first memory device is in communication with said information input/output device;

wherein said information input/output device can be releaseably coupled to said first information input/output port; and

wherein said information input/output device can be releaseably coupled to said second information input/output port.

9. (original) The data storage and retrieval system of claim 8, further comprising a library controller.

10. (original) The data storage and retrieval system of claim 8, further comprising a distributed control network.

11. (original) The data storage and retrieval system of claim 10, wherein each of said one or more accessors further comprises an accessor control card.

12. (original) The data storage and retrieval system of claim 11, wherein one or more of said one or more accessors further comprises a second memory device in communication with said information input/output device, wherein said second memory device is disposed on said accessor control card.

13. (original) The data storage and retrieval system of claim 8 further comprising an information transfer station, wherein said backplane unit is disposed in said information transfer station.

14. (withdrawn) A method to transfer designated information having a file size between a host computer and one or more hard disks disposed in one or more hard disk drive units removeably disposed within a data storage and retrieval system, wherein said data storage and retrieval system comprises a moveable accessor comprising a memory device having a storage capacity and an information transfer station, and wherein said accessor can be positioned such that said memory device can communicate with each of said one or more hard disks and such that said memory device can communicate with said information transfer station, said method comprising the steps of:

comparing said file size with said storage capacity; and

transferring said designated information between said host computer and said one or more hard disks using said memory device if said file size is smaller than said storage capacity.

15. (withdrawn) The method of claim 14, wherein said information transfer station comprises a transfer station information input/output port, and wherein a first one of said hard disk drive unit further comprises a first read/write head and a first information input/output port in communication with said first read/write head, and wherein said accessor further comprises an information input/output device in communication with said memory device, wherein said transferring step further comprises the steps of:

positioning said accessor adjacent said information transfer station;

releaseably coupling said information input/output device to said first input/output port;

downloading said designated information to said memory device;  
positioning said accessor adjacent said first hard disk drive unit;  
releaseably coupling said information input/output device to said first input/output port;  
and  
storing said designated information on said first hard disk.

16. (withdrawn) The method of claim 15, wherein said data storage and retrieval system further comprises a second hard disk disposed in a second hard disk drive unit, wherein said second hard disk drive unit comprises a second read/write head and a second information input/output in communication with said second read/write head, said method further comprising the steps of:

positioning said accessor adjacent said second hard disk drive unit;  
releaseably coupling said information input/output device to said second input/output port; and  
storing said designated information on said second hard disk.

17. (withdrawn) The method of claim 15, wherein said designated information comprises a first component and a second component, wherein said storing step comprises the step of storing said first component of said designated information on said first hard disk.

18. (withdrawn) The method of claim 17, wherein said data storage and retrieval system further comprises a second hard disk disposed in a second hard disk drive unit, wherein said second hard disk drive unit comprises a second read/write head and a second information input/output port in communication with said second read/write head, said method further comprising the steps of:

positioning said accessor adjacent said second hard disk drive unit;  
releaseably coupling said information input/output device to said second input/output port; and  
storing said second component of said designated information on said second hard disk.

19. (withdrawn) The method of claim 14, wherein said data storage and retrieval system includes two or more hard disk drive units and wherein said information transfer station comprises a transfer station information input/output port in communication with said host computer, and wherein a first one of said two or more hard disk drive units comprises a first hard disk containing first information, a first read/write head, and a first information input/output port in communication with said first read/write head, and wherein a second one of said two or more hard disk drive units comprises a second hard disk containing second information, a second read/write head, and a second information input/output port in communication with said second read/write head, and wherein said accessor further comprises an information input/output device in communication with said memory device, said transferring step further comprising the steps of:

positioning said accessor adjacent said first hard disk drive unit;  
releaseably coupling said information input/output device to said first input/output port;  
downloading said first information to said memory device;  
positioning said accessor adjacent said second hard disk drive unit;  
releaseably coupling said information input/output device to said second input/output port;  
downloading said second information to said memory device; positioning said accessor

adjacent said information transfer station;

positioning said accessor adjacent said information transfer station;

releaseably coupling said information input/output device to said transfer station  
input/output port; and

providing said first information and said second information to said host computer.

20. (withdrawn) A data storage and retrieval system comprising a computer useable medium having computer readable program code disposed therein for transferring designated information having a file size between a host computer and one or more hard disks disposed in one or more hard disk drive units each of which comprises an information input/output port in communication with the hard disk disposed therein, wherein said data storage and retrieval system further comprises a moveable accessor having an information input/output device in communication with a memory device having a storage capacity, and an information transfer station having a transfer station information input/output port in communication with said host computer, and wherein each of said one or more information input/output ports can be releaseably coupled to said information input/output device such that each of said one or more hard disks can communicate with said memory device, and wherein said information input/output device can be releaseably coupled to said transfer station information input/output port such that said memory device can communicate with said host computer, the computer readable program code comprising a series of computer readable program steps to effect:

comparing said file size with said storage capacity;

transferring said designated information between said host computer and said one or more hard disks using said memory device if said file size is not greater than said storage

capacity.

21. (withdrawn) The data storage and retrieval system of claim 20, wherein said computer readable program code further comprises a series of computer readable program steps to effect:

positioning said accessor adjacent said information transfer station;

releaseably coupling said information input/output device to said information station input/output port;

downloading said designated information to said memory device;

positioning said accessor adjacent a first one of said one or more hard disk drive units comprising a first input/output port and a first hard disk;

releaseably coupling said information input/output device to said first input/output port; and

storing said designated information on said first hard disk.

22. (withdrawn) The data storage and retrieval system of claim 21, wherein said data storage and retrieval system further comprises a second hard disk disposed in a second hard disk drive unit, wherein said second hard disk drive unit comprises a second read/write head and a second information input/output port in communication with said second read/write head, wherein said computer readable program code further comprises a series of computer readable program steps to effect:

positioning said accessor adjacent said second hard disk drive unit;

releaseably coupling said information input/output device to said second input/output port; and



storing said designated information on said second hard disk.

23. (withdrawn) The data storage and retrieval system of claim 21, wherein said designated information comprises a first component and a second component, wherein said computer readable program code further comprises a series of computer readable program steps to effect storing said first component of said designated information on said first hard disk.

24. (withdrawn) The method of claim 23, wherein said data storage and retrieval system further comprises a second hard disk disposed in a second hard disk drive unit, wherein said second hard disk drive unit comprises a second read/write head and a second information input/output port in communication with said second read/write head, wherein said computer readable program code further comprises a series of computer readable program steps to effect:

positioning said accessor adjacent said second hard disk drive unit;

releaseably coupling said information input/output device to said second input/output port; and

storing said second component of said designated information on said second hard disk.

25. (withdrawn) The data storage and retrieval system of claim 20, wherein a first one of said one or more hard disk drive units comprises a first hard disk containing first information, a first read/write head and a first information input/output port in communication with said first read/write head, wherein said computer readable program code further comprises a series of computer readable program steps to effect:

positioning said accessor adjacent said first hard disk drive unit;

releaseably coupling said information input/output device to said first input/output port;

downloading said first information to said memory device;

positioning said accessor adjacent said information transfer station;  
releaseably coupling said information input/output device to said transfer station  
input/output port; and  
providing said first information to said host computer.

26. (withdrawn) The data storage and retrieval system of claim 25, wherein said data storage and retrieval system further comprises a second hard disk disposed in a second hard disk drive unit, wherein said second hard disk drive unit comprises a second hard disk containing second information, a second read/write head, and a second information input/output port in communication with said second read/write head, said method further comprising the following steps:

positioning said accessor adjacent said second hard disk drive unit;  
releaseably coupling said information input/output device to said second input/output  
port;  
downloading said second information to said memory device; and  
providing said second designated information to said host computer.